

Application No. 10/776,727

No. 5000-1-521

IN THE ABSTRACT*Please amend the Abstract as follows:*

A method for upstream traffic control in an Ethernet-based passive optical network, ~~adapted for preventing that prevents~~ a penalty phenomenon occurring in making upstream data transfer on the basis of a High Priority First Allocation (HPFA) algorithm. ~~The method includes the steps of~~ It is determined ~~determining~~ whether there are any data frames to transfer in the first buffer (B1); ~~if it is determined that there are any data frames to transfer in the first buffer, and determining whether the data frame does not exceed a low water mark (M) indicative of a reference value set up to ensure the minimum transfer traffic, if it is determined that the data frame in the first buffer does not exceed the low water mark, If M is not exceeded, then transferring the data frame stored in the first buffer~~ B1 is transferred and it is determined ~~whether the data frame in a second buffer B2 does not exceed M, the low water mark; if it is determined that the data frame in the second buffer does not exceed the low water mark, then If M is not exceeded, it is determined~~ ~~determining~~ whether the data frame to transfer in a third buffer B3 ~~does not exceed the low water mark~~ does not exceed M; ~~if it is determined that the data frame to transfer in the third buffer does not exceed the low water mark, then transferring the~~ The respective data frame stored in the second and third buffers B2 and B3 is transferred when the data frame in B3 does not exceed M.